

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006702**Date Inspected:** 07-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhao Chen Sun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG components**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Dilip Chakrabarti was present during the times noted above for observations relative to the work being performed.

Bay# 6-OBG Assembly

This QA Inspector randomly observed the following work in progress:

Magnetic Particle Testing (MT):

For Green Tag:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6028 MT report on this date.

The member and the weld designations are as follows:

Sl # Section # Weld # Green Tag # Location

1. FB 203-010 004,006,008 007155 8 C

2. DP 202-010 06,08,10,12,14 007153 8 C

3. BP 201-012 001,002 007152 9 D

4. SP 201-010 001,003,005,007 007151 8 C

5. BP 203-011 001,002,003 007154 9 B

Bay# 6-Tower Assembly

This QA Inspector randomly observed the following work in progress:

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

### SMAW Process:

Welding of weld joints# B/B-16 located on PCMK ESD1 DPSA4-4. Welder is identified as 066481. ZPMC QC is identified as Liu Hua Jie. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-3312-TC-P5.

Welding of weld joints# B/B-12 located on PCMK ESD1 DPSA4-4. Welder is identified as 037779. ZPMC QC is identified as Liu Hua Jie. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-3312-TC-P5.

### SAW Process:

Welding of weld joints# 3A located on PCMK WD1-A305-53M-1,2,3,4. Welder is identified as 054458. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-4221-b-U-3c-S.

### FCAW Process:

Welding of weld joints# 4,13 located on PCMK WD1 CBSA3-1-7. Welder is identified as 019006. ZPMC QC is identified as Liu Zhi. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P4-F-1.

Welding of weld joints# 21 located on PCMK WD1 CBSA3-1-7. Welder is identified as 222396. ZPMC QC is identified as Liu Zhi. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P4-F-1.

Welding of weld joints# 43 located on PCMK WD1 CBSA3-1-7. Welder is identified as 220688. ZPMC QC is identified as Liu Zhi. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P4-F-1.

Welding of weld joints# 1,45 located on PCMK WD1 CBSA3-1-7. Welder is identified as 209554. ZPMC QC is identified as Liu Zhi. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2332-TC-P4-F-1.

### Bay # 7-OBG Assembly:

This QA Inspector randomly observed the following work in progress:

### FCAW Process:

Welding of weld joints# 3&4 located on PCMK FB 203-012. Welder is identified as 053742. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2132-3.

Welding of weld joints# 7&8 located on PCMK FB 203-012. Welder is identified as 202841. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the specified WPS no. B-T-2132-3.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

Bay# 5-OBG Assembly

This QA Inspector randomly observed the following work in progress:

Final VT:

This QA inspector performed Final Visual Testing (FVT) of entire welded area of 2 no each, miscellaneous items PCMK CTS 5 & CTS 6, previously tested and accepted by ZPMC Quality Control personnel.

Ultrasonic Testing:

For Green Tag

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6027 UT report on this date.

The member and the weld designations are as follows:

Sl # Section # Weld # Green Tag # Location

1. BK 002-001 001,002,003,004,010 005040 1A
2. BK 003-001 001,002,003,004,010 005039 1B

Magnetic Particle Testing (MT):

For Green Tag:

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL-6028 MT report on this date.

The member and the weld designations are as follows:

Sl # Section # Weld # Green Tag # Location

1. TR 18-18TB2-002 010 005041 CB1,CB2,CB3
2. TR 18-18TB5-001 001 005041 CB1,CB2,CB3

Unless otherwise noted, all work observed on this date appeared to be generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Chakrabarti,Dilip Kumar	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

---